

THE OBSTRUCTIVE QUESTION AT THE METROPOLITAN COURT OF SEWERS.

ON Wednesday last a meeting of the commissioners was held, in pursuance of a special summons, for the purpose of ascertaining, from documentary and other evidence, the truth of certain statements made by Mr. Chadwick and others with regard to flushing sewers, as noticed in THE BUILDER of last week. The Rev. Wm. Stone, M.A., presided.

The requisition having been read by Mr. Woolrych, the clerk, Mr. Bullar said he had received a communication from Sir John Burgoyne, which set forth, that as a matter of order, Sir John considered it to be inexpedient to enter into any discussion on the requisition, on account of its personal character, "as he believed it to be calculated to diminish the feeling of cordiality and action which every one would admit ought to be encouraged amongst the commissioners." Sir John proposed that a resolution should be adopted, suggesting another requisition for the purpose of considering the question of flushing, and omitting any reference to the opinions or statements of other members of the commission. He, Mr. Bullar, fully coincided with Sir John Burgoyne as to the necessity of such a step being taken at that stage of the proceedings, so that time might not be wasted, nor angry and unprofitable discussions indulged in.

The Rev. E. Murray moved that a resolution, in the form of Sir John Burgoyne's suggestion, be adopted; and Mr. Bullar seconded the motion.

Mr. Leslie objected. Certain statements had gone forth to the world impeaching the "morality" of himself, Mr. Byng, and Mr. Bidwell, as to this movement, and he (Mr. Leslie) did not think it was just to take any steps which might lead to stifling an important inquiry. If it was found that any plan was pursued by which the money of the public was wasted, surely they were not justified in pursuing such a course, even for another hour. Why need there be additional delay? The requisitionists were prepared with their proofs, but they were prevented from submitting them. First, they had been "counted out;" now they were told that their requisition was not properly worded; all they wanted was to go at once into the question, and they had no doubt of convincing even Mr. Chadwick himself that they were right, and he was wrong.

Mr. Johnson contended that "the dignity of the court" required to be maintained by their not permitting personal accusations to mix with notices of motion, or in matters of debate. The policy of flushing was the question, into which he thought they could not fully enter, unless the notice on the paper was altered.

After much irregular conversation, the resolution was carried.

Mr. Hume, M.P., then moved—"That with the view of enabling this board to decide as to the accuracy of the charges made as to the expenditure, at different times, for the works performed under the former and the present Commissioners of Sewers, Mr. Leslie, Mr. Byng, and Mr. Bidwell be requested to call for papers and returns of the expenditure in such case, and that a court be summoned to consider the whole question as soon as the facts shall have been selected." He (Mr. Hume) contended, that unless they "condescended to particulars,"—"to use a Scotch but most expressive phrase,—"they would make no progress in the investigation."—Carried.

Mr. Bullar then proposed, and Mr. Leslie seconded a resolution, which was carried, requiring the secretary to prepare an account, in detail, of all the expenditure and particulars of, and incident to, the flushing works done since the opening of the commissions in 1847.

Miscellaneous.

COMPETITION FOR THE RESTORATION OF NORTHFLEET CHURCH.—Sir: A competition was called for as far back as May 10th, and the drawings were to be sent in on June 5th. In common with many others I sent in designs on that day. On the 26th of July, not hearing anything as to their fate, I wrote to the vestry clerks, Messrs. Southgate and Son, requesting to know whether the committee had come to any decision, and on the 30th received for answer, that the committee had decided upon two plans; and, "although in many respects my plan appeared to possess great merit, they felt, on the whole, others must be approved." I did not receive this answer until after the successful architect had advertised for tenders from builders. I naturally expected after this the committee would return my drawings, but it seems this committee have no notion of troubling themselves with the rejected plans, for although I have written, I can neither obtain them nor any reply.—J.

MORE IRON HOUSES.—The Messrs. Belt-house and Co., of Manchester, are constructing four iron dwellings to be sent to California. One of them, now finished, is 20 feet long by 10 feet wide; the roof is elliptically arched, having a spring of about 18 inches in the width of 10 feet. One cottage was made with a pitched roof, but the arch is preferred. The inside height of the house is 7 feet 6 inches from the floor to the spring, and 9 feet to the centre, of the arch. Internally, the house comprises two rooms; the "house part," or day room, 12 feet 6 inches by 10 feet, and the bed-room, 7 feet 6 inches by 10 feet. The cottage has one outer door into the day room, an inner door between the rooms, and a window in each room. In each gable wall, within the arched portion, are four circular holes for ventilation, so that when open at both ends, and the inner door is also open, a current of air can pass through the house. The windows have also an opening by swivel and rack, like those in our factories. The whole fabric is of iron; the walls and roof of wrought-iron plates, 1-8th of an inch thick, and averaging about 5 feet by 2 feet 6 inches. These are framed on angle iron and T iron uprights, each plate numbered so as to fit into its own place, and all are fastened together, without rivets, by bolts and nuts only. Externally there are three uprights on each; these are of hollow roll iron, which, being filled with wood, can have screws to them inside a wooden lining, which is being applied to two of the cottages about to be sent out. The roof eaves project about eight inches, so as to keep the rain off, and the whole structure is so compactly fitted, as to be perfectly water-tight. The external walls rest on a foundation of balks of timber, upon which are laid iron bases, forming a moulding on the outside, which prevents the water from settling there, and at the same time gives a finished appearance to the house. There is no flooring provided, it being intended that the floor shall be levelled on the spot, and either made of puddled clay or of boards, at the choice of the settler. The doors are simple frames of wrought-iron, covered with sheets of iron, and having lock and latch. Each window is 3 ft. deep by 2 ft. 4 in. wide; the frame-work wholly of cast-iron, containing 16 panes, of which the four centre ones open on a swivel, with a segmental rack, for setting it open at three different angles, very similar to those in cotton factories. The weight of iron in one of these houses is about 2½ tons; and one such cottage costs (unlined) about 60*l.*; if lined with wood, about 10*l.* more.

REPORT ON SCHOOL OF DESIGN.—The wishy-washy character of the recent Parliamentary report on the London school is apparent to others besides ourselves. The *Athenæum* says:—"It certainly does seem a curious problem why, when every circumstance has seemed to favour the institution of schools of design in this country—when we know that they were established by the highest power in the state to supply a publicly recognized want on the part of the community—when there has never been a period at which in their public declarations their managers have not seemed animated by the greatest sincerity and devotion towards conducting their operations to a successful end—when the state and the manufacturers have given their money, the masters their energies, and the students their attention—when among the lists of managers and masters we meet constantly with names of individuals occupying high positions in government, art, and letters,—it does, we say, seem a strange problem why all inquiries into the progress of the school have resulted in an uniform admission that it was not in a position to furnish the world of manufacture with what it was expressly created to supply—good, efficient, and properly-educated designers. It certainly is not, to be sure, in the present milk-and-water report that we shall find any resolution of this 'crux.' We must mount higher up the stream, above the point where Parliamentary etiquette and the unwillingness to give personal offence to 'powers that be' have thrown the veil of polite ambiguity over the ugly yet honest faces of Truth and Candour."

TINTED GLASS FOR GREENHOUSES.—The *Literary Gazette* says, that the tinted glass used in the great Palm Stove, Kew, is a failure; and that this enormous structure will have to be reglazed with common glass.

AMERICAN METHOD OF TEMPERING EDGE TOOLS.—For heating axes or other similar articles, a heating furnace is constructed, in the form of a vertical cylinder, the exterior made of sheet-iron, lined with firebrick, 4 feet 8 inches diameter, or of such outside diameter as to give it an inside one of 4 feet, and 3 feet high. In the interior of this cylinder several fire-chambers are formed—usually four. The inner wall of each fire-chamber is 1½ inches long, 4 inches from front to back, and about 4 inches in depth—forming, in the whole, a circle of 3 feet 4 inches diameter. Under each there are grate bars, and air is supplied through a pipe connected with a blowing apparatus. A circular table of cast-iron, 3 feet 4 inches diameter, is made to revolve slowly on the level with the upper part of the said chamber. This chamber is sustained on a central shaft, which passes down through the furnace, and has its bearing in a step below it: a pulley keyed on to it serves to communicate rotatory motion to the table. When the axes or other articles are to be heated, they are placed upon the table, with their bits or steels parts projecting so far over its edge as to bring them directly over the centre of the fire, and the table is kept slowly revolving during the whole time of heating. When duly heated, they are ready for the process of hardening. The hardening bath consists of a circular vat of salt water: within the tub or vat, a little above the surface of the liquid, is a wheel, mounted horizontally with a number of books around the periphery, upon which the axes or other articles are suspended. The height of the hooks from the surface of the liquid is such as to allow the steels part only to be immersed. As soon as the hardening is effected, the articles are removed from the hooks, and cooled by dipping in cold water. With the best cast-steel, a temperature of 510 deg. Fahr. has been found to produce a good result in hardening in about 45 minutes.—*Scientific American*.

UNWISE EXPENDITURE FOR BRITANNIA BRIDGE.—Can you inform an ignoramus what reason can possibly be given for forming the approaches, as well as the bridge itself, of the enormously expensive tubes? To me, I must own, it appears that this is a stupendous instance of the reckless manner in which Directors often waste the funds intrusted to them. The bridge consists (as you know), of eight tubes, laid in pairs, side by side, four of which will span the whole water way; and the four others, two at each end, will form the approaches over the steep banks of the Strait. Now, it appears quite obvious, that the tubes over the dry land, or bank, possess no advantage whatever over approaches made in the usual manner by a viaduct; consequently the excess of the cost of these tubes at each end above the cost of common arches must be just so much money thrown away.—*FRUGI*.

IRON SEWER FOR THE THAMES.—Is not the recently constructed tube at the Menai Straits suggestive of a plan of sewerage? Let us suppose a series of tubes laid down on each side of the river, made of wrought iron strongly riveted, and in lengths of 20 ft. by 12 in height, and 8 in breadth—the top of the tubes either level with or only one or two feet below the bed of the river. There can be no difficulty in sinking these tubes: any derangement might be quickly remedied, and the saving in expense, as compared with Mr. Phillips's tunnel, enormous. The junctions could be easily made, and at any time closed or altered, *pro re nata*. These tubes could be carried from Hammersmith to Woolwich Reach, at a distance from each shore of about 40 feet, or say about half-way between high and low water marks. Corrugated iron towers of about 6 ft. square might rise at intervals of a furlong, for the escape of the gases generated, and provided with a sluice or flood-gate on one side for the admission of water at ebb tide, when a greater impetus is required, as is often the case in a long drought. The natural and proper incline of the bed of the river to seaward might be kept; and at the terminus at Woolwich Marshes might be a spacious dock, in which the accumulated sewage could be drained and solidified, taking advantage of the ebb to get rid of the superfluous moisture. Let us once more be able to say of our river—

"Infirmit capiti sulk atilis, utilis auro."

QUINTUS.